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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,270	07/25/2003	Ulfar Erlingsson	08828.0006-00000	7588

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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
LLP  
901 NEW YORK AVENUE, NW  
WASHINGTON, DC 20001-4413

EXAMINER
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HOMAYOUNMEHR, FARID

ART UNIT	PAPER NUMBER
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2132

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08/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/627,270

Applicant(s)

ERLINGSSON ET AL.

Examiner

Farid Homayounmehr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to communications: application, filed 7/25/2003; amendment filed 6/5/2007.
2. Claims 1-21 are pending in the case.

### ***Response to Arguments***

3. Applicant has amended the claims to include the limitation of transmission of watermarked packets from the client to server, and argues that Moskowitz is limited to only providing a watermarked packet from a vendor server to a customer client. However, Moskowitz teaches a transmission system for transmitting watermarked packets. The transmission takes place from both sides of the communicating party as Moskowitz teaches two-way communication systems (see for example paragraph 17). Therefore, the watermarked packets are sent from both sides of communication, and not only from the server to client. Another example of two-way transmission is shown in paragraph 106, where it is clearly shown that a transmitting device downloads and uploads data using by sending and receiving packets.

In addition, Moskowitz teaches his invention of watermarked packets based on IP packets (see for example, paragraphs 30-31). IP packets are transmitted between the

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client and the server in both ways. Therefore, not only the teachings of Moskowitz is not limited to transmission from server to client, but also it clearly teaches a system that transmits from a client to a server.

Applicant's argument relative to other claims is based on the same argument addressed above. The following section outlines the rejections to the amended claims.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. Claims 1 to 7, 10-17, 20 to 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Moskowitz (US Patent Application Publication No. 2003/0200439, filed 4/14/2002).

5.1. As per claim 1, Moskowitz is directed to a method for providing secure transmissions across a network comprising a client device and a server (parag. 11, describing a transmission system that checks to see if transmitted packets are authentic, and therefore describing a secured transmission. Note that Moskowitz

teaches a two way transmission system (see the section titled response to arguments above), and therefore the transmission is both from client to server and vice versa), the method comprising: at the transmitting device, generating a stream of watermark bits (parag 30); generating a plurality of watermarks, each of the plurality of watermarks comprising an index number and a portion of the stream of watermark bits (parag 31, indicating an identifier (index) in each water mark, associating it with the watermark key); inserting at least one of the plurality of watermarks into each header of a plurality of outgoing packets (parag 30 to 43. Also see claim 1); receiving, at the server (the receiving device when IP packet transmission is from client to server), the plurality of outgoing packets (parag 44); and determining if a received packet is valid based on the watermark in the header of the received packet (parag 45-47. See also claim 2).

5.2. As per claim 2, Moskowitz is directed to the method of claim 1, wherein generating the stream of watermark bits includes generating a stream of watermark bits from an authorization and synchronization packet previously exchanged between the client device and the server (paragraph 46 indicates that the WID is distributed from senders to the receivers prior to transmission of packets bearing the watermark, and according to paragraphs 31-32, the watermarks are generated based on the WID).

5.3. As per claim 3, Moskowitz is directed to the method of claim 1, further comprising activating a session by exchanging an authorization and synchronization packet

between the client device and the server (paragraph 46 indicates that a secure session is created between senders and receivers to distribute the WID).

5.4. As per claim 4, Moskowitz is directed to the method of claim 1, further comprising: discarding the packet, if the watermark is not valid (parag. 45).

5.5. As per claim 5, Moskowitz is directed to the method of claim 1, wherein determining if a received packet is valid comprises: comparing the watermark of the received packet to a first and a second window, each of the windows comprising a set of expected watermarks; and accepting the watermark as valid if the received watermark matches one of the expected watermarks in the first or second windows (parag. 45 teaches comparing the watermarks to a table of WIDs to find the appropriate WID. Therefore it teaches comparing the watermarks to several windows containing a set of potential matching watermarks)

5.6. As per claim 6, Moskowitz is directed to the method of claim 5, wherein the set of expected watermarks are generated from an authorization and synchronization packet previously exchanged between the client device and the server (parag 46).

5.7. As per claim 7, Moskowitz is directed to the method of claim 5, comprising: discarding the packet, if the watermark does not match one in the first or second windows (parag 45).

5.8. As per claim 10, Moskowitz is directed to the method of claim 1, wherein the stream of watermark bits is generated by a stream cipher (paragraph 30-32).

5.9. As per claim 11, Moskowitz is directed to the method of claim 1, wherein inserting at least one of the plurality of watermarks includes determining whether a valid session exists and inserting the at least one of the plurality of watermarks only if the valid session exists (paragraph 46 indicates that the WID is sent in a secure session prior to sending the packets).

5.10. Limitations of claims 12-17 and 20-21 are substantially similar to claims 1-7 and 10-11 above.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 8, 9, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moskowitz (US Patent Application Publication No. 2003/0200439, filed 4/14/2002).

7.1. As per claim 8, Moskowitz is directed to the method of claim 5, wherein comparing the watermark further comprises:

maintaining at the server a record of a pivotal index number representing the index number of the highest-numbered valid watermark received from the client device;

comparing the watermark of the received packet to a first and a second window, each of the windows comprising a set of expected watermarks and wherein the first window represents expected watermarks whose index numbers precede the pivotal index number and the second window represents expected watermarks whose index numbers immediately supersede the pivotal index number (Moskowitz teaches comparing the packet's watermark to the watermarks in a first and second window as described in response to claim 5. Moskowitz also teaches recording and using a pivotal index number of representing the index number of the highest-numbered valid watermark received from the transmitting device in paragraphs 32-42. Considering the first packet in the sequence of packets as representing the highest-numbered valid watermark received from the transmitting device, the other packets in the sequence will have their corresponding matching watermark sequentially in the WID. For example, the matching watermark corresponding to the second packet is found in the WID at the location superceding the first matching watermark corresponding to the first received



packet (pivotal packet). Considering the last packet as the pivotal packet, the matching watermarks corresponding to the other packets in the stream of packets will be found sequentially at the preceding locations relative to matching watermark corresponding to the last packet of the stream. Therefore, it would have been obvious to a person skilled in art to use the above mentioned teachings of Moskowitz, and implement an indexing method based on sequential ordering of matching watermarks and a pivotal packet as required by the claim limitation).

7.2. As per claim 9, Moskowitz is directed to the method of claim 8, comprising: increasing the pivotal index number if a match is found in the second window and deleting the matching expected watermark from the second window (see response to claim 8, and note that when the router (paragraph 45 verifies the validity of a packet, it will sequentially move to the next packet and deletes the useless data (matching watermark for the packet already verified) as it is standard practice in computer systems to delete the useless data).

7.3. Limitations of claims 18 and 19 are substantially similar to claims 8 and 9 above.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farid Homayounmehr whose telephone number is (571) 272-3739. The examiner can be normally reached on 9 hrs Mon-Fri, off Monday biweekly.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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***Farid Homayounmehr***

***8/2/2007***

A handwritten signature in black ink, appearing to read "Gilberto 3", with a long horizontal stroke extending to the right.

GILBERTO BARRON JR  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100